DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP 1602-B
SHEET 2 OF 3

Base from U.S. Geological Survey 1:62500: Parker Dam, 1959. 1:24000: Standard Wash, 1959; Buck Mountains, Buck Mountains NE, Buck Mountains SE, Crossman Peak, Franconia, Lake Havasu City North, 1970; Lake Havasu City South, 1975

SCALE 1:48 000

1 ¼ 0 1 2 3 MILES

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 40 AND 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ARIZONA
AREA OF MAP

Gravity data collected and reduced by R.E. Bracken, T.B. Gage, and R.W. Simpson, 1980-82

Geology mapped by K.A. Howard, J.E. Pike, and J.K. Nakata, 1980-82; H.G. Wilson and S.L. Reneau, 1981-82; B.E. John and D.M. Peterson, 1980-81; and J.W. Goodge and V.L. Hansen, 1981

EXPLANATION

200 — MAGNETIC CONTOURS--Showing magnetic field of sheet 1 reduced to the pole assuming induced magnetization with inclination 60° and declination 14°. Upward continuation filter (1,000 ft) has been applied to smooth chevron patterns in the digital data. Numbers indicate the field intensity in gammas. Hachures mark closed areas of low magnetic intensity. Contour interval is 20 and 100 gammas

SOURCES OF ANOMALIES--Indicating the probable causes of magnetic high and low anomalies. Queried where the sources are not exposed or are uncertain. Subscripted numbers refer to individual anomalies discussed in the text

AHAG	High attributed to Proterozoic augen gneiss
AHQMD	High attributed to Precambrian quartz monzodiorite
AHGND	High attributed to undifferentiated Precambrian gneisses and Tertiary dikes
AHV	High attributed to Tertiary volcanics
AHA	High attributed to Precambrian amphibolite
ALS	Low attributed to sedimentary fill in basins
ALV	Low attributed to Tertiary volcanics either altered or reversely magnetized
ALPC	Low attributed to relatively non-magnetic Precambrian rocks
AL	Small low anomalies best seen on sheet 1 in the eastern and southeastern parts of the wilderness study area that might be related to local alteration, topographic effects, or the presence of reversely magnetized igneous rocks
T	Anomalies related to large topographic features

STEEP MAGNETIC GRADIENT--Positioned with the help of a pseudo-gravity representation of the aeromagnetic data. Shorter dashes where less well defined

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1986

CORRELATION OF MAP UNITS

QTa		QUATERNARY AND TERTIARY	
Tvs	Miocene	TERTIARY	
Kg		CRETACEOUS(?)	gnd — TERTIARY AND PROTEROZOIC
Pg / Pag		PROTEROZOIC	

AEROMAGNETIC MAP REDUCED TO THE POLE

AEROMAGNETIC AND ISOSTATIC GRAVITY MAPS OF THE CROSSMAN PEAK WILDERNESS STUDY AREA, MOHAVE COUNTY, ARIZONA

By

Robert W. Simpson, Thomas B. Gage, and Robert E. Bracken

1986

DESCRIPTION OF MAP UNITS

QTa	ALLUVIUM (QUATERNARY AND TERTIARY) - - Includes talus deposits on Black Mountain
Tvs	VOLCANIC AND SEDIMENTARY ROCKS (MIOCENE) - - Flows, breccia, and tuff of silicic to basaltic composition; fanglomerate, conglomerate, sandstone, and claystone
Kg	GRANITE AND DIORITE (CRETACEOUS?)
Pg	GRANITOID ROCKS (PROTEROZOIC) - - Porphyritic and equigranular granite and quartz monzodiorite
Pag	AUGEN GNEISS (PROTEROZOIC) - - Granite to granodiorite composition. Gradational to porphyritic granite of the granitoid rocks unit
gnd	GNEISS AND DIKES (TERTIARY AND PROTEROZOIC) - - Garnet granite gneiss, amphibolite, biotite granite gneiss, pegmatite, and rare pelitic gneiss and quartzite, of Proterozoic age, all intruded by a dense swarm of northwest-striking felsic and mafic dikes of Tertiary age

——— CONTACT - - Dashed where approximately located

FAULT - - Dashed where approximately located; dotted where concealed; hachures on upper plate of detachment fault. Bar and ball on downthrown side